

***What Is Claimed Is:***

1        1. A test unit for an aircraft cabin telephony system, comprising:  
2              a pair of connectors for inserting the test unit in-line within the system;  
3              an AC voltage module operative to indicate the presence of an AC voltage  
4        when the test unit is connected to the Cabin Delivery System connector of the  
5        cabin telephony system;

6              a signal module operative to detect the presence of data signals when the  
7        test unit is connected to the Cabin Delivery System connector;

8              a DC power module operative to indicate the presence of DC voltage when  
9        the test unit is connected to a seat telephony box within the cabin telephony  
10      system; and

11              an AC current module operative to detect an over-current condition when  
12       the test unit is connected to the Cabin Delivery System connector of the cabin  
13       telephony system.

1        2. The test unit of claim 1, further comprising:

2              a relay bank operative to selectively couple the AC voltage module, signal  
3        module, and DC power module to the pair of connectors as a function of the AC  
4        voltage present on the connectors.

1        3. The test unit of claim 2, wherein the signal module comprises  
2       means for detecting the presence of E1 signals.

1           4. The test unit of claim 3, wherein the AC voltage module  
2 comprises:  
3           an AC voltage detect unit having  
4           a window comparator, and  
5           a current source coupled to the comparator.

1           5. The test unit of claim 4, wherein the signal module comprises:  
2           an inbound E1 signal module configured to detect the presence of inbound  
3           E1 signals; and  
4           an outbound E1 signal module configured to detect the presence of  
5           outbound E1 signals.

1           6. The test unit of claim 5, wherein each of the E1 signal modules  
2 comprises:  
3           a monostable multivibrator configured to lengthen the duration of the  
4           pulses of the E1 signal.

*Addai*